

## **Transaction Costs of Land Development Process on Housing – The Example of TOKI**

Spatial planning, as a public activity, decides how to use land. The reason for giving this authority to the state is that the cumulative benefit is low if the individual decides it. Planning restricts land use but also reduces the uncertainties. It creates a more specific urban area in terms of investors and ordinary citizens.

Theories of classical economics assume that individuals make rational decisions. High transaction costs are explained by market imperfections such as lack of information. Whereas actors are rational, they are faced with many unique and inconsistent choices that the information is incomplete and the result is uncertain. Coase found that some transaction costs were required for the use of the market, and that the availability of a good or service through the market was an effect on the market price of that good or service (Coase 1937). According to Pitelis (1993), economists are only interested in the market before Coase, this mono-institutional world, the aim of economic theory is to optimize, equilibrate and maintain market equality. In the aftermath of Coase, as a second institution, companies were added to the structure. Coase added an institution in 1960, entitled "The problem of social cost": law and state (Pitelis 1993). Coase has initiated an analytical tradition suggesting that individuals are maximizing their behavior within the framework of stable and consistent preference orders. According to this, in a world where information is costly, individuals try to economize transaction costs, some of them act opportunistically and their rationality is limited. The new institutional economy analysis uses private ownership rights, contracts and transaction costs (Egbu, Olomolaiye, ve Gameson, 2008). Transaction costs theory has been available for both public and private sector plans and gave the opportunity to establish a link between coordination and implementation. Transaction costs and the new institutional economic theory have the potential to make better explanations in this area (Alexander, 1992; Buitelaar, 2004; Lai, 2005; Egbu, et al., 2008; Cho, 2011).

In the planning literature, using of the transaction cost analysis is quite new. Alexander (2001), as a one of first studies in this field, provided an institutional analysis for the Israeli planning system. Buitelaar (2004) also analyzed the transaction costs in the housing project development process in the Netherlands. Buitelaar (2007) also made a comparative transaction cost analysis of the Netherlands having a planning practice based on plan and national state structure, the English planning system based on discretionary power and focused on development control, and the United States of America having a special system which is not based on zoning in planning. While Egbu, Olomolaiye and Gameson (2008) analyzed the land development process in the planning system of Nigeria, Omar and Prijono (2009) made an analysis of the land development process in the Malaysian planning system. Krabben and Buitelaar (2011) provided an analysis of the land development process of industrial structures in the Netherlands. Cho (2011) analyzed the land development process in the planning system of South Korea.

Turkey, which is a developing country, has more uncertainties in the planning system. The planning system of Turkey failed to solve the urban problems arising as a result of the rapid urbanization process starting in the 50s. In urban areas in Turkey, as well as local government units, central government units have a share in the production of land, directly or indirectly, with the authority granted by special laws. On the other hand, urban land is in sufficient quantity and diversity,

appropriate for housing requirements, cannot be produced (Kentleşme Şurası 2009, 2009). In Turkey, after 2000, several legal and administrative changes were made which modified the planning practice.

In the post-2000 period, the planning authorities are given to the central administrative institutions by special purposed laws. This means fragmentation in the planning field. In the process, the authorities and powers of the central administrative units have increased. As for the rationale of legislation to facilitate the highlights of process is seen as accelerating and be free from bureaucracy. Regulations on post-2000, the existing planning rules and development control arrangements have been prepared to bypass for certain designated projects and investments. The purpose of the regulations concerning the public space seems to be to obtain the maximum profit (Balaban 2012).

In the Turkish planning system, the complexity of legislation, the complexity of the types of plans and the identification of competent institutions, and the uncertainties in defining of the planning process are factors that increase transaction costs. TOKİ also has an important place in the fragmented structure formed in the post-2000 period. Established with the role of providing financing for mass housing applications, TOKİ has become one of the major actors in housing production. For example, in Istanbul, which is the biggest city in the country, TOKİ has produced more than 200.000 houses in the last 15 years. 60% of the houses were for the upper income groups and most of them are produced by public-private partnership, especially by the Emlak Konut REIC. The shareholding of TOKİ gives the company opportunity purchasing lands without tender processes, and for accessing the most suitable lands for development by Emlak Konut and to access TOKİ's land inventory.

TOKİ, as an institution affiliated to the Prime Ministry, has the authority to carry out local physical plans within the limits of authority determined by the Council of Ministers, to implement land readjustment and expropriation. The powers held by the local government in the current planning system are used by TOKİ hand. The main reason for the granting of these powers has been shown to be quickly met housing demand. The authority given by the fact that the bureaucracy in the normal process slowed down housing production, give opportunity to TOKİ to produce housing independently of local physical plans at its own jurisdictions. This has reduced the uncertainties in the planning process as well as the number of actors affected by the plan.

According to van Keulen and Hoek (2003) people that favour PPPs add value to the project but they often forget to mention the transaction cost. Transaction costs are the costs that are incurred to increase the information available to us and to reduce uncertainty (Buitelaar, 2004). It is assumed that the fewer the transaction costs the more smooth and efficient the development process. The aim of this study is to determine the transaction costs in the TOKİ projects by analyzing of the land development process.

In the Turkish planning literature, there are no adequate studies other than Baharoğlu and Leitmann (1998) who analyzed the supply of infrastructure in shanty areas in Turkey and Kuyucu (2014) who analyzed the role of the legal vagueness on the establishment of the private ownership regime and its institutionalization. Turk and Korthals Altes (2010) examined the institutional structure of the land development process of some recent large-scale housing projects using a framework of institutional analysis by taking into consideration transaction steps. Although these studies were prepared within the scope of the new institutional economic theory, they do not include an analysis of the transaction costs of the planning system.

In the paper, in the second section the following introduction section, the transaction costs theory and its using in urbanplanning are given. In the third section, the expanded authorities of TOKI in the post-2000 period are examined. In the fourth section, the transaction costs in the TOKİ projects are analyzed. In the last part is devoted to the general evaluation and conclusions.

At the end of the paper, transaction costs in the TOKI projects will be determined. Post-2000 regulations accelerated the housing production process of TOKI and also give an advantage to Emlak Konut REIC. In the growth of the company, the advantage that is provided by the decrease in transaction costs is important. In the literature, although there are a lot of studies on the housing production process of TOKI, there is no study that demonstrates the advantages of transaction costs. Findings obtained in the TOKI case may make a contribution to developing countries with similar dynamics.

**Key words:** transaction cost, housing, land development process, TOKI, Turkey,

## REFERENCES

Alexander, E. R. (1992). A Transaction Cost Theory of Planning. *Journal of the American Planning Association*(58:2), 190-200.

Buitelaar, E. (2004). A Transaction-cost Analysis of the Land Development Process. *Urban Studies*, 41(13), 2539-2553.

Coase, R. (1937). The Nature of Firm. *Economica*, 4(16), 386-405.

Nedham, B., & Kam, G. d. (2004). Understanding How Land is Exchanged:Co-ordination Mechanisms and Transaction Cost. *Urban Studies*, 41(10), 2061-2076.

Türk, Ş., & Korthals Altes, W. (2010). Institutional capacities in the land development for housing on greenfield sites in Istanbul. *Habitat International*, 2(34), 183-195.